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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/586,711

05/23/2007

Mark Davison

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EXAMINER

CAJILIG, CHRISTINE T

ART UNIT

PAPER NUMBER

3633

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/586,711	<b>Applicant(s)</b> DAVISON ET AL.	
	<b>Examiner</b> CHRISTINE T. CAJILIG	<b>Art Unit</b> 3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/7/09, 7/20/07, 10/20/06</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority based on applications filed in Australia on 2/20/2004 and 1/20/2004. It is noted, however, that applicant has not filed a certified copy of the 2004904004 and 2004900259 applications as required by 35 U.S.C. 119(b).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "the adjacent edge face" in line 3. There is insufficient antecedent basis for this limitation in the claim. Moreover, it is not clear whether the adjacent edge face refers to another face of an adjacent constructional element or to an edge face of the claimed construction element.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 13-16, and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Sironi (U.S. Patent No. 3,783,572).

Regarding claims 1 and 2, Sironi discloses a composite constructional element comprising: a plank profile (10) defining a rear face (1-3) and two opposed edge sections (12) of the constructional element, each edge section including an edge face; and a cladding material (28) molded into the plank profile to extend continuously between the opposed edge faces such that it is retained by the rear face and the opposed edge faces and wherein the plank profile further comprises at least one retaining formation (13, 2') shaped to retain the molded cladding material attached to the plank profile.

Regarding claim 3, Sironi further discloses that the retaining formations (13, 2') are formed adjacent to or as part of the edge sections.

Regarding claim 4, Sironi further discloses that the retaining formations comprise longitudinal channels of substantially uniform cross section and filled with cladding material, and being shaped in cross section to retain the molded cladding material attached to the plank profile.

Regarding claim 5, Sironi further discloses that the cladding material forms substantially an entire front face of the constructional element.

Regarding claim 13, Sironi further discloses that the plank profile is formed from sheet steel (Col 2, Ln 58-64).

Regarding claim 14, Sironi further discloses that the plank profile is roll formed (Col 2, Ln 58-64).

Regarding claim 15, Sironi further discloses that the plank profile includes at least one longitudinal stiffening formation comprising a ridge (formed by 1 or 2).

Regarding claim 16, Sironi further discloses that the cladding material comprises concrete (Col 6, Ln 20-23).

Regarding claims 18 and 19, Sironi discloses a method of manufacturing a composite constructional element comprising the steps of: providing a plank profile (10) comprising a rear face (1-3) and two opposed edge sections (12), each edge section including an edge face, the plank profile further comprising at least one retaining formation (Col 6, Ln 32-41); and molding a cladding material (28, Col 6, Ln 24-28) into the plank profile such that it extends continuously between the opposed edge faces and is retained by the rear face and the opposed edge faces.

Regarding claim 20, Sironi further discloses that the plank profile is roll formed from sheet steel (Col 2, Ln 58-64).

Regarding claim 21, Sironi further discloses that the plank profile comprises the only mould for molding the cladding material.

Claims 1, 6, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Steel (U.S. Patent No. 3,932,976).

Regarding claims 1, 6, and 12, Steel discloses a composite constructional element comprising: a plank profile (17) defining a rear face (11) and two opposed edge

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sections (15/22) of the constructional element, each edge section including an edge face; and a cladding material (10) molded into the plank profile to extend continuously between the opposed edge faces such that it is retained by the rear face and the opposed edge faces; wherein the edge section comprises an attachment formation (12/15) for attachment to a mating attachment formation on an adjacent construction element, and wherein the plank profile, including the rear face, the edge sections and the attachment formations, is integrally formed from a sheet material.

Claims 1, 6-9, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Ting (U.S. Patent No. 4,316,351).

Regarding claims 1 and 6, Ting discloses a composite constructional element comprising: a plank profile (10) defining a rear face (12) and two opposed edge sections (14/15) of the constructional element, each edge section including an edge face; and a cladding material (13) molded into the plank profile to extend continuously between the opposed edge faces such that it is retained by the rear face and the opposed edge faces; and wherein the edge section comprises an attachment formation (14/15) for attachment to a mating attachment formation on an adjacent construction element.

Regarding claim 7, Ting further discloses that the attachment formations comprise a frontwardly facing channel (defined by 26, 27, 46-48) formed on one edge section and a rearwardly projecting lip (37) formed on the opposed edge section, wherein the lip is capable of clipping into or being retained at a channel of an adjacent constructional element.

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Regarding claim 8, Ting further discloses that the lip (37) includes a recess (42) such that, when clipped into or retained at a mating channel of an adjacent constructional element, a recess is defined between a base of the mating channel and the lip.

Regarding claim 9, Ting further discloses that the channel projects outwards beyond one edge face (44), and the lip is formed inwards from the opposed edge face (19).

Regarding claim 11, Ting further discloses that when the plank profile comprises at least one retaining formation shaped to retain the molded cladding material attached to the plank profile, the lip comprises one of the retaining formations.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sironi.

Regarding claim 17, Sironi discloses the structure discussed above but does not disclose that the cladding material is glass reinforced cement.

It would have been obvious to one having ordinary skill in the art at the time of invention to use glass reinforced cement, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the

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intended use as a matter of obvious design choice. *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Using glass reinforced cement would provide a material with increased impact resistance.

As best understood, claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ting in view of Scott (U.S. Patent No. 3,594,028).

Regarding claim 10, Ting discloses that part of the channel (at 52) is formed of a separate piece with a depending portion (54) embedded in the cladding material, but does not disclose that the entire channel is formed as a separate piece.

Scott in Figure 8 discloses that a channel (defined by 43 and 44) is entirely formed as a separate piece of a joint structure and includes a depending portion (38, 40). It would have been obvious to a person having ordinary skill in the art at the time of the applicant's invention to modify Ting to have the channel formed entirely of a separate piece as taught by Scott to provide the predictable result of facilitating assembly.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Holmgren (US 3583123); Anderson (US 4177615); Johansson (US 6314698); Guzzo (US 3852933); Curran (US 3482367); Lenoir (US 3466831); Lindner (US 3401493); Mengerinhausen (US 4501052).



Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTINE T. CAJILIG whose telephone number is (571) 272-8143. The examiner can normally be reached on Monday-Thursday, 9 am - 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on (571) 272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. T. C./  
Examiner, Art Unit 3633

/Robert J Canfield/  
for D. Dunn, SPE of Art Unit 3633